

Amendments to the Claims:

The following (next page) Listing of Claims will replace all prior versions, and listings, of claims in the application.

1 1. (Currently Amended) A method of providing a checkpoint/restart facility  
2 across a plurality of plurality of computer systems, wherein:  
3 the plurality of computer systems comprises:  
4       a first computer system executing a first program, and  
5       a second computer system containing a disk system and  
6       executing a second program;  
7       the first computer system and the second computer system are  
8       heterogeneous computer systems;  
9       said method comprising:  
10      A) checkpointing a current status of the first program resulting in a  
11       first set of checkpoint status information;  
12      B) transmitting a first checkpoint request that includes the first set of  
13       checkpoint status information from the first program over a  
14       first session to the second program;  
15      C) checkpointing the second program resulting in a second set of  
16       checkpoint status information in response to receiving the first  
17       checkpoint request;  
18      D) writing the first set of checkpoint status information and the  
19       second set of checkpoint status information to a first  
20       checkpoint file on the disk system; and  
21      E) transmitting a first checkpoint response from the second program  
22       over the first session to the first program after the writing in  
23       step (D) is complete.;  
24      F) checkpointing the first program resulting in a third set of  
25       checkpoint status information;  
26      G) transmitting a second checkpoint request that includes the third set  
27       of checkpoint status information from the first program over  
28       the first session to the second program;  
29      H) checkpointing the second program resulting in a fourth set of  
30       checkpoint status information in response to receiving the first  
31       checkpoint request transmitted in step (G);  
32      I) writing the third set of checkpoint status information and the  
33       fourth set of checkpoint status information to a second  
34       checkpoint file on the disk system;

35       J) transmitting a second checkpoint response from the second  
36       program over the first session to the first program after the  
37       writing in step (I) is complete;  
38       K) transmitting a first rollback request from the first program over the  
39       first session to the second program;  
40       L) reading the third set of checkpoint status information and the  
41       fourth set of checkpoint status information from the second  
42       checkpoint file in response to receiving the first rollback  
43       request transmitted in step (K);  
44       M) rolling back the second program utilizing the fourth set of  
45       checkpoint status information read in step (L);  
46       N) transmitting a first rollback response from the second program  
47       over the first session to the first program that includes the third  
48       set of checkpoint status information read in step (L); and  
49       O) rolling back the first program utilizing the third set of checkpoint  
50       status information in response to receiving the first rollback  
51       response in step (N).

1       2. (Cancelled)

1       3. (Cancelled)

1       4. (Currently Amended) The method in claim 2-1 wherein:  
2           the first checkpoint file and the second checkpoint file are a same file.

1       5. (Cancelled)

1 6. (Currently Amended) The method in claim 1 which further comprises:

2       FP) transmitting a ~~second~~third checkpoint request that includes the

3           first set of checkpoint status information from the first program

4           over a second session to a third program executing in a third

5           computer system;

6       GQ) checkpointing the third program resulting in a ~~fourth~~fifth set of

7           checkpoint status information in response to receiving the

8           ~~second~~third checkpoint request;

9       HR) writing the first set of checkpoint status information and the

10           ~~fourth~~fifth set of checkpoint status information to a ~~second~~

11           third checkpoint file; and

12       IS) transmitting a ~~second~~third checkpoint response from the third

13           program over the second session to the first program after the

14           writing in step (HR) is complete.

1 7. (Cancelled)

1 8. (Cancelled)

1 9. (Original) The method in claim 1 wherein:  
2 there are plurality of sessions open between the first program and the  
3 second program for accessing a corresponding plurality of files  
4 by the second program; and  
5 the checkpointing in step (C) flushes all of the plurality of files and  
6 includes checkpoint information for all of the plurality of files  
7 in the second set of checkpoint information.

1 10. (Cancelled)

1 11. (Cancelled)

1 12 (Cancelled)

### 1.13 (Cancelled)

1 14. (Cancelled)

1 15. (Cancelled)

1 16. (Cancelled)

1 17. (Cancelled)

1 18. (Cancelled)

1 19. (Cancelled)

1 20. (Cancelled)